

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. – 24. (Canceled)

25. (Currently Amended): A program storage device readable by a machine tangibly embodying a program of instructions executable by the machine to perform method steps for determining and displaying risk information based on a technical wellbore design and Earth properties, said method steps comprising:
generating a drillstring design for a wellbore in each hole section of the wellbore in response to a required wellbore geometry and a required wellbore trajectory of the wellbore;
receiving ~~said plurality of~~ input data, ~~[[said]]~~the input data including a ~~plurality of~~ input data calculation results, wherein the input data comprises the drillstring design data;
comparing ~~[[each]]~~ the input data calculation results of ~~the said plurality of~~ input data calculation results with a each logical expression of ~~a plurality of~~ logical expressions;
ranking by the ~~[[said]]~~ logical expression the ~~[[said]]~~ calculation result, and generating a ~~plurality of~~ ranked risk values in response thereto, each of the ~~said plurality of~~ ranked risk values representing an input data calculation result that has been

ranked by ~~[[said]]~~ the logical expression as either a high risk or a medium risk or a low risk;
generating ~~[[said]]~~ risk information in response to ~~[[said]]~~ the ~~plurality of~~ ranked risk values; and
displaying ~~[[said]]~~ the risk information.

26. (Currently Amended): The program storage device of claim 25, wherein the ~~[[said]]~~ risk information comprises a ~~one or more~~ ranked risk category ~~categories~~.

27. (Currently Amended): The program storage device of claim 25, wherein the ~~[[said]]~~ risk information comprises ~~one or more~~ a ranked subcategory risk~~[[s]]~~.

28. (Currently Amended): The program storage device of claim 25, wherein the ~~[[said]]~~ risk information comprises a plurality of ranked individual risks.

29. (Currently Amended): The program storage device of claim 26, wherein the ~~[[said]]~~ risk category ~~categories~~ ~~are~~ is selected from a group consisting of: an average individual risk, a subcategory risk, an average subcategory risk, a total risk, an average total risk, a potential risk for a ~~[[each]]~~ design task, and an actual risk for the ~~[[each]]~~ design task.

30. (Currently Amended): The program storage device of claim 29, wherein the ~~[[said]]~~ subcategory risks ~~of said risk categories~~ is selected from a group consisting of: gains risks, losses risks, stuck pipe risks, and mechanical risks.
31. (Currently Amended): The program storage device of claim 28, wherein said individual risks are selected from a group consisting of: H2S and CO2, Hydrates, Well water depth, Tortuosity, Dogleg severity, Directional Drilling Index, Inclination, Horizontal displacement, Casing Wear, High pore pressure, Low pore pressure, Hard rock, Soft Rock, High temperature, Water-depth to rig rating, Well depth to rig rating, mud weight to kick, mud weight to losses, mud weight to fracture, mud weight window, Wellbore stability window, wellbore stability, Hole section length, Casing design factor, Hole to casing clearance, casing to casing clearance, casing to bit clearance, casing linear weight, Casing maximum overpull, Low top of cement, Cement to kick, cement to losses, cement to fracture, Bit excess work, Bit work, Bit footage, bit hours, Bit revolutions, Bit Rate of Penetration, Drillstring maximum overpull ~~overpull~~, Bit compressive strength, Kick tolerance, Critical flow rate, Maximum flow rate, Small nozzle area, Standpipe pressure, ECD to fracture, ECD to losses, Gains, Gains Average, Losses, Losses average, Stuck, Stuck average, Mechanical, Mechanical average, Risk Average, Subsea BOP, Large Hole, Small Hole, Number of casing strings, Drillstring parting, and Cuttings.
32. (Currently Amended): The program storage device of claim 26, wherein the step of generating the ~~[[said]]~~ risk information in response to ~~said plurality of the~~ ranked risk

values comprises the step[[s]] of[[:]] receiving ~~said plurality of~~ the ranked risk values and calculating the ~~said one or more~~ ranked risk categories.

33. (Currently Amended): The program storage device of claim 32, wherein the step of displaying the [[said]] risk information comprises the step of: displaying the ~~said one or more~~ ranked risk categories.

34. (Currently Amended): The program storage device of claim 27, wherein the step of generating the [[said]] risk information in response to the ~~said plurality of~~ ranked risk values comprises the step[[s]] of[[:]] receiving ~~said plurality of~~ ranked risk values and calculating the ~~said one or more~~ ranked subcategory risks.

35. (Currently Amended): The program storage device of claim 34, wherein the step of displaying the [[said]] risk information comprises the step of: displaying ~~said one or more~~ the ranked subcategory risks.

36. (Currently Amended): The program storage device of claim 28, wherein the step of generating the [[said]] risk information in response to the ~~said plurality of~~ ranked risk values comprises the steps of[[:]] receiving the ~~said plurality of~~ ranked risk values and using ~~said plurality of~~ the ranked risk values to represent ~~said plurality of~~ the ranked individual risks.

37. (Currently Amended): The program storage device of claim 36, wherein the step of displaying the ~~[[said]]~~ risk information comprises the step of ~~[[:]]~~ displaying ~~said plurality~~ of the ranked individual risks.

38. – 70. (Canceled)